



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,590	07/15/2003	Tomoko Ohtsuki	240394US-90 CONT	6881
22850	7590	06/14/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			KIM, PETER B	
			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 06/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Wn

# Office Action Summary

Application No.

10/618,590

Applicant(s)

OHTSUKI ET AL.

Examiner

Peter B. Kim

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 106-118, 122-132, 136-144, 148-182 and 184-232 is/are pending in the application.
- 4a) Of the above claim(s) 185-209 and 211-232 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 106-118, 122-132, 136-144, 148-182, 184 and 210 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 09/831,345.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>122003, 72003</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

This application contains claims 185-209, and 211-232 drawn to an invention nonelected with traverse in the reply filed on Apr. 30, 2004. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 106-118, 122-125, 127-132, 136, 137, 139-144, 148, 149, 151-159, 161-165, 167-173, 179-182, and 184 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohtsuki et al. (Ohtsuki) (WO99/46835).

Since U.S. Patent 6,590,698 corresponds to WO99/46835, the following reference numbers, columns and lines refer to the U.S. document.

Ohtsuki discloses a light source unit that generates light with a single wavelength, a light generating portion which generates a single wavelength laser light having wavelength 1.5 micrometer (col. 6, lines 15-46); a fiber group made up of a plurality of optical fibers in parallel in a bundle fiber where optical amplification is performed by a fiber amplifier (col. 9, line 48 –

Art Unit: 2851

col. 10, line 19); a light amount control unit which controls light amount emitted (col. 12, line 20 – col. 13, line 65); and a wavelength conversion portion which generates one of 8<sup>th</sup> harmonic and a 10<sup>th</sup> harmonic wave (col. 6, lines 15-46). Ohtsuki discloses wherein a mode field diameter at downstream before the light output is large (col. 17, line 65 – col. 18, line 6). Ohtsuki discloses Fabry-Perot etalon (col. 10, lines 6-19), a beam monitor mechanism and a control unit which performs wavelength calibration based on temperature dependence data, (col. 10, line 60 – col. 11, line 31). Ohtsuki also discloses a wavelength stabilizing method including measuring temperature dependence, performing an absolute wavelength calibration, setting the detection reference wavelength to the set wavelength and controlling a wavelength of the laser based on the detection result (col. 10, line 60 – col. 12, line 19). Ohtsuki discloses a polarization adjustment unit (col. 18, lines 27-49), and controlling a peak power of the pulse light (col. 17, line 65 – col. 18, line 6).

Claims 151-153, 158 and 179 are rejected under 35 U.S.C. 102(e) as being anticipated by Hagiwara (US 2001/0048083).

Hagiwara discloses a light source unit comprising a laser light source (1) which oscillates a laser beam, a beam monitor mechanism (31) including a Fabry-Perot etalon (para 0048) which monitors the optical properties of laser beam to maintain a center wavelength at a predetermined wavelength (para 0030), and a first control unit which performs calibration based on temperature dependence of reference wavelength (para 0059, 0060). Hagiwara also discloses an absolute wavelength close to the set wavelength (para 0056-64). Hagiwara also discloses feedback control (para 0008).

Owa discloses in Fig. 1, and 7, a light source unit comprising a light generating portion (211) which generates light with a single wavelength (col. 7, lines 45-54), a fiber group (12) made up of a plurality of optical fibers, and a light amount control unit which controls light amount emitted from the optical fiber group by individually turning on/off light output from each optical fiber where different optical fibers group is turned on and off at the different times (col. 20, line 52 – col. 21, line 60). Owa also discloses the wavelength conversion portion (14), which converts light within the range of infrared to visible region to ultraviolet light which is a harmonic wave of the laser beam (col. 5, lines 45-60). Owa also discloses an optical modulator (65) which generates a pulse light having a predetermined frequency, and Owa discloses a delay portion which individually delays light output by setting some fiber output at a predetermined value and setting others at zero (Fig. 11-13).

Claims 106, 124-127, 136-139, 148-151, 159-162, 166, 174-178 and 210 are rejected under 35 U.S.C. 102(e) as being anticipated by Nishi (2003/0081192).

Nishi discloses a light source unit that generates light with a single wavelength, a light generating portion which generates a single wavelength laser light having wavelength 1.5 micrometer (para 0047); a fiber group made up of a plurality of optical fibers in parallel in a bundle fiber where optical amplification is performed by a fiber amplifier (para 0050-0054); a light amount control unit which controls light amount emitted (para 0062); and a wavelength conversion portion which generates one of 8<sup>th</sup> harmonic and a 10<sup>th</sup> harmonic wave (para 0055).

Nishi discloses polarization adjustment unit (para 0096, 0108), and a light amplifying unit including phosphate glass and bismuth oxide glass doped with rare-earth element (para 0089).

***Response to Arguments***


As indicated before, the examination for both inventions I and II requires searches in different areas, and the restriction requirement is proper.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter B. Kim whose telephone number is (571) 272-2120. The examiner can normally be reached on 8:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Peter B. Kim  
Primary Examiner  
Art Unit 2851